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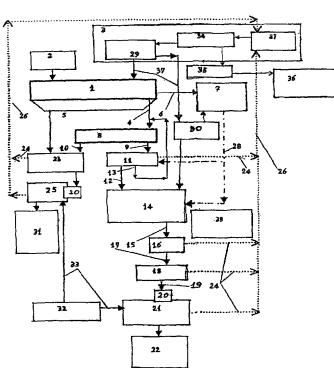
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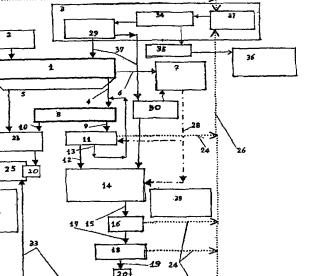
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[Continued on next page]

(54) Title: PROCESS FOR THE PRODUCTION OF TITANIUM DIOXIDE



Schematic diagram of the facility



(57) Abstract: It is disclosed a process for the production of titanium dioxide comprising the following steps: (a) a titanium ore containing iron, preferably ilmenite, is reacted with an aqueous NH₄F solution; (b) the aqueous suspension thus obtained is filtered with consequent separation of a sludge fraction, which contains ammonium fluoroferrates, and a filtrate fraction, which contains ammonium fluorotitanates; (c) the filtrate fraction thus obtained is subjected to an hydrolysis reaction; (d) the thus-obtained solid component is subjected to a thermal hydrolysis reaction. The plant and the reactors for performing the above process are also disclosed.

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— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,

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